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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,285

04/12/2007

Edward Walenty Tota

183-21

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24336

7590

04/16/2008

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EXAMINER

WEBER, JONATHAN C

ART UNIT

PAPER NUMBER

4174

MAIL DATE

DELIVERY MODE

04/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,285	Applicant(s) TOTA, EDWARD WALENTY	
	Examiner Jonathan C. Weber	Art Unit 4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 & 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 85,888 issued to H. Ball (Ball).

Regarding claim 8, Ball teaches a rock breaking cartridge comprising: a tubular body (In view of Figure 1), an enclosure which is defined inside the tubular body (In view of Figure 1), a propellant inside the enclosure (In view of Figure 1, hatching adjacent to the stemming device is the filler and the other hatching is the powder or charge, Col. 2, Lines 22-26), a stemming device (In view of Figure 1, a, b, & c) which is positioned inside the tubular body and which, upon activation, expands a portion of the tubular body in a radial sense, the stemming device being spaced from the enclosure (Col 1, Lines 25-46), and a filler (In view of Figure 1, hatching adjacent to the stemming device is the filler and the other hatching is the powder or charge, Col. 2, Lines 22-26) inside the tubular body between the enclosure and the stemming device.

Regarding claim 9, Ball teaches a rock breaking cartridge according to claim 8 wherein the stemming device includes components with relatively inclined surfaces (a, b, & c) which are relatively movable thereby to cause a portion of the tubular body in which the stemming device is located to expand radially (Col. 1, Lines 25-46).

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3. Claims 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 00/60301 by Gavrilovic (Gavrilovic).

Regarding claim 8, Gavrilovic teaches a rock breaking cartridge comprising: a tubular body (10F), an enclosure which is defined inside the tubular body (10F), a propellant inside the enclosure (16), a stemming device (24F, 86) which is positioned inside the tubular body and which, upon activation, expands a portion of the tubular body in a radial sense, the stemming device being spaced from the enclosure (In view of Figure 14), and a filler (14) inside the tubular body between the enclosure and the stemming device.

Regarding claim 9, Gavrilovic teaches a rock breaking cartridge according to claim 8 wherein the stemming device includes components with relatively inclined surfaces (24F, 86) which are relatively movable thereby to cause a portion of the tubular body in which the stemming device is located to expand radially (Page 12, Lines 5-11, and In view of Figure 14, the cap would form a section of the tubular body when coupled to the cartridge as suggested).

Regarding claim 10, Gavrilovic teaches a rock breaking cartridge according to claim 9 wherein the tubular body is weakened to facilitate expansion thereof by the stemming device (Page 11, Lines 14-18).

Regarding claim 11, Gavrilovic teaches a rock breaking cartridge according to claim 10 wherein the tubular body is split at least in a longitudinal sense thereby to define at least one portion of the tubular body which is readily expansible in a radial sense upon activation of the stemming device (Page 11, Lines 14-18).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/60301 by Gavrilovic (Gavrilovic) in view of U.S. Patent 2,812,712 issued to Ashurst (Ashurst).

Regarding claim 13, Gavrilovic teaches a rock breaking cartridge according to claim 9.

Gavrilovic fails to disclose the rock breaking cartridge further comprising two-wedge-shaped components forming a substantially cylindrical body which are positioned inside the tubular body with a relatively close fit with a large face of one component facing the filler. Ashurst discloses two-wedge-shaped components forming a substantially cylindrical body which are positioned inside the tubular body with a relatively close fit with a large face of one component facing the filler (In view of Figure 3). At the time of the invention, one of ordinary skill in the art would have found it obvious to combine the teachings of Gavrilovic with the teachings of Ashurst. The suggestion/motivation to combine these references would be providing an alternative means for sealing the blast hole prior to blasting.

Regarding claim 15, Gavrilovic modified by Ashurst teaches the limitations of claim 13, and Ashurst further discloses wherein one component includes a groove in an outer surface (In view of Figure 3, 8 & 8') to accommodate a lead wire (9) extending to an igniter in the propellant (The fuse (9) acts as an igniter). At the time of the invention, one of ordinary skill in the art would

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have found it obvious to combine the teachings of Gavrilovic with the teachings of Ashurst. The suggestion/motivation to combine these references would be to provide a path for the wiring.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over International Publication WO 00/60301 by Gavrilovic (Gavrilovic) in view of U.S. Patent 1,192,958 issued to Tucker (Tucker).

Regarding claim 14, Gavrilovic teaches a rock breaking cartridge according to claim 9.

Gavrilovic fails to disclose the rock breaking cartridge wherein the stemming device comprises at least a first component which defines a wedge-shaped cavity, a wedge shaped barrel in the cavity and a thread mechanism which draws the barrel into the cavity to radially expand the at least first component. Tucker discloses the stemming device comprising at least a first component which defines a wedge-shaped cavity (15), a wedge shaped barrel (16) in the cavity and a thread mechanism (13) which draws the barrel into the cavity to radially expand the at least first component (Page 1, Lines 35-61). At the time of the invention, one of ordinary skill in the art would have found it obvious to combine the teachings of Gavrilovic with the teachings of Tucker. The suggestion/ motivation to combine these references would be providing an alternative means for sealing the blast hole prior to blasting.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited disclose different variations of the subject matter discussed within the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan C. Weber whose telephone number is (571)270-5377. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly D. Nguyen can be reached on (571)272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimberly D Nguyen/
Supervisory Patent Examiner, Art Unit 4174

/J. C. W./
Examiner, Art Unit 4174